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NEWS 5	MAY 10	CA/CAplus enhanced with 1900-1906 U.S. patent records
NEWS 6	MAY 11	KOREAPAT updates resume
NEWS 7	MAY 19	Derwent World Patents Index to be reloaded and enhanced
NEWS 8	MAY 30	IPC 8 Rolled-up Core codes added to CA/CAplus and USPATFULL/USPAT2
NEWS 9	MAY 30	The F-Term thesaurus is now available in CA/CAplus
NEWS 10	JUN 02	The first reclassification of IPC codes now complete in INPADOC
NEWS 11	JUN 26	TULSA/TULSA2 reloaded and enhanced with new search and and display fields
NEWS 12	JUN 28	Price changes in full-text patent databases EPFULL and PCTFULL
NEWS 13	JUl 11	CHEMSAFE reloaded and enhanced
NEWS 14	JUl 14	FSTA enhanced with Japanese patents
NEWS 15	JUl 19	Coverage of Research Disclosure reinstated in DWPI

NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8
NEWS X25	X.25 communication option no longer available

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FILE 'HOME' ENTERED AT 12:51:30 ON 06 AUG 2006

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 12:51:37 ON 06 AUG 2006
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FILE COVERS 1907 - 6 Aug 2006 VOL 145 ISS 7
FILE LAST UPDATED: 4 Aug 2006 (20060804/ED)

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http://www.cas.org/infopolicy.html

```
=> s (make up gas or supplemental gas)
         235401 MAKE
         183608 MAKES
         406320 MAKE
                   (MAKE OR MAKES)
        1161741 UP
          12624 UPS
        1172413 UP
                   (UP OR UPS)
        1514333 GAS
         511435 GASES
        1696248 GAS
                   (GAS OR GASES)
            196 MAKE UP GAS
                   (MAKE(W)UP(W)GAS)
          12619 SUPPLEMENTAL
        1514333 GAS
         511435 GASES
        1696248 GAS
                   (GAS OR GASES)
             38 SUPPLEMENTAL GAS
                   (SUPPLEMENTAL(W)GAS)
L1          234 (MAKE UP GAS OR SUPPLEMENTAL GAS)

=> s l1 and flow rate
         852194 FLOW
          87059 FLOWS
         890941 FLOW
                   (FLOW OR FLOWS)
        1763181 RATE
         589435 RATES
        2104529 RATE
                   (RATE OR RATES)
         124883 FLOW RATE
                   (FLOW(W)RATE)
L2           40 L1 AND FLOW RATE

=> s l2 and (prevent? (3a) catalyst or fluidiza? catalyst or prevent? (4a) catalyst
(4a) precipitat?)
         870303 PREVENT?
         729863 CATALYST
         732702 CATALYSTS
```

```
936653 CATALYST
         (CATALYST OR CATALYSTS)
  3510 PREVENT? (3A) CATALYST
 13250 FLUIDIZA?
729863 CATALYST
732702 CATALYSTS
936653 CATALYST
         (CATALYST OR CATALYSTS)
    46 FLUIDIZA? CATALYST
         (FLUIDIZA?(W)CATALYST)
870303 PREVENT?
729863 CATALYST
732702 CATALYSTS
936653 CATALYST
         (CATALYST OR CATALYSTS)
 87620 PRECIPITAT?
198139 PPT
 65715 PPTS
244726 PPT
         (PPT OR PPTS)
153067 PPTD
     1 PPTDS
153068 PPTD
         (PPTD OR PPTDS)
 36452 PPTG
258365 PPTN
  4231 PPTNS
260988 PPTN
         (PPTN OR PPTNS)
592399 PRECIPITAT?
         (PRECIPITAT? OR PPT OR PPTD OR PPTG OR PPTN)
    40 PREVENT? (4A) CATALYST (4A) PRECIPITAT?
L3   0 L2 AND (PREVENT? (3A) CATALYST OR FLUIDIZA? CATALYST OR PREVENT?
       (4A) CATALYST (4A) PRECIPITAT?)
```

Freeform Search

Database: US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Term: initial flow rate and fischer tropsch

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Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ			
L5	initial flow rate and fischer tropsch	13	L5
L4	initail flow rate and fischer tropsch	0	L4
L3	predetermind flow rate	2	L3
L2	L1 and (reference flow rate or predetermind flow rate)	2	L2
L1	fluidized bed and supplemental gas	40	L1

END OF SEARCH HISTORY

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Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 20050209351 A1

L2: Entry 1 of 3 File: PGPB Sep 22, 2005

PGPUB-DOCUMENT-NUMBER: 20050209351
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20050209351 A1

TITLE: Prevention of and recovering from a catalyst bed slumping in a gas-agitated multiphase reactor

PUBLICATION-DATE: September 22, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Mohedas, Sergio R.	Ponca City	OK	US
Espinoza, Rafael L.	Ponca City	OK	US
Cnossen, Jack E.	Ponca City	OK	US
Harkins, Todd H.	Ponca City	OK	US
Melquist, Vincent H.	Willmar	MN	US
Swinney, Larry D.	Stillwater	OK	US

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	COUNTRY	TYPE CODE
ConocoPhillips Company	Houston	TX		02

APPL-NO: 10/804521 [PALM]
DATE FILED: March 19, 2004

INT-CL-PUBLISHED: [07] C07 C 27/26

US-CL-PUBLISHED: 518/726
US-CL-CURRENT: 518/726

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

The invention relates to methods for prevention of and recovery from a catalyst bed slumping in a gas-agitated multiphase hydrocarbon synthesis reactor, while the reactor is either under non-reactive conditions or under reaction promoting conditions when syngas is converted to products. The reactor contains a catalyst bed comprising catalyst particles and a gas injection zone suitable for injecting a

reactor gas feed. A method for preventing bed slumping comprises supplying a supplemental gas to the gas-agitated multiphase reactor to prevent the catalyst bed from slumping due to insufficient reactor gas feed flow. The method may include recycling some or all of the supplemental gas to the reactor. The method may further comprise separating the gas injection zone from the catalyst bed with a porous plate so as to prevent migration of catalyst particles into the gas injection zone and to minimize plugging of gas distributor(s) present in said zone.

☐ 2. Document ID: US 20040048938 A1

L2: Entry 2 of 3 File: PGPB Mar 11, 2004

PGPUB-DOCUMENT-NUMBER: 20040048938
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040048938 A1

TITLE: Gas agitated multiphase reactor with stationary catalyst solid phase

PUBLICATION-DATE: March 11, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Mohedas, Sergio R.	Ponca City	OK	US
Espinoza, Rafael L.	Ponca City	OK	US
Zhang, Jianping	Ponca City	OK	US

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	COUNTRY	TYPE CODE
Conoco Inc.	Houston	TX	US	02

APPL-NO: 10/238008 [PALM]
DATE FILED: September 9, 2002

INT-CL-PUBLISHED: [07] C07 C 27/26, B01 J 8/04

US-CL-PUBLISHED: 518/726; 422/188
US-CL-CURRENT: 518/726; 422/188

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

An apparatus for converting a gaseous and/or liquid feed fluid to gaseous and/or liquid products using a solid catalyst comprises a reactor, a liquid phase disposed within the reactor volume, a fixed catalyst at least partially disposed in the liquid phase, a cooling system having a cooling element in thermal contact with the liquid phase, a feed inlet positioned to feed the feed fluid into the reactor volume, and a fluid outlet in fluid communication with the liquid phase. The catalyst is contained in a catalyst container and the container may be adjacent to

said cooling element, extend through said cooling element, or may surround the catalyst container. The catalyst may be a Fischer-Tropsch catalyst.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 3. Document ID: US 20040048938 A1

L2: Entry 3 of 3 File: DWPI Mar 11, 2004

DERWENT-ACC-NO: 2004-281254
DERWENT-WEEK: 200426

TITLE: Conversion apparatus for gaseous or liquid feed fluid, e.g. carbon monoxide and hydrogen, to gaseous or liquid products, e.g. hydrocarbon, comprises gas agitated multiphase reactor

INVENTOR: ESPINOZA, R L; MOHEDAS, S R ; ZHANG, J

PRIORITY-DATA: 2002US-0238008 (September 9, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20040048938 A1	March 11, 2004		012	C07C027/26

INT-CL (IPC): B01 J 8/04; C07 C 27/26

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw D

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Term	Documents
GAS	2828801
GASES	678993
AGITATED	157423
AGITATEDS	1
MULTIPHASE	20502
MULTIPHASES	77
REACTOR	430955
REACTORS	101703
(((AGITATED NEAR2 GAS) ADJ MULTIPHASE) ADJ REACTOR).TI..PGPB,USPT,USOC,EPAB,JPAB,DWPI.	3
((GAS NEAR2 AGITATED MULTIPHASE REACTOR).TI.).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	3

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NEWS 13	JUl 11	CHEMSAFE reloaded and enhanced
NEWS 14	JUl 14	FSTA enhanced with Japanese patents
NEWS 15	JUl 19	Coverage of Research Disclosure reinstated in DWPI

NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

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FILE COVERS 1907 - 6 Aug 2006 VOL 145 ISS 7
FILE LAST UPDATED: 4 Aug 2006 (20060804/ED)

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```
=> s gas agitated fluidized bed
       1514333 GAS
        511435 GASES
       1696248 GAS
                  (GAS OR GASES)
         26292 AGITATED
         69733 FLUIDIZED
             1 FLUIDIZEDS
         69733 FLUIDIZED
                  (FLUIDIZED OR FLUIDIZEDS)
        165728 BED
         66197 BEDS
        189676 BED
                  (BED OR BEDS)
L1           1 GAS AGITATED FLUIDIZED BED
                  (GAS(W)AGITATED(W)FLUIDIZED(W)BED)

=> d l1

L1   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1958:112856  CAPLUS
DN   52:112856
OREF 52:19875a-d
TI   Purifying and desulfurizing zinc sulfide ores and concentrates
IN   Long, Carleton C.; Najarian, Herand K.
PA   St. Joseph Lead Co.
DT   Patent
LA   Unavailable
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   US 2847294                 19580812    US 1952-265318          19520107


=> s prevent? (s) catalyst particle? (s) slump?
        870303 PREVENT?
        729863 CATALYST
        732702 CATALYSTS
        936653 CATALYST
                  (CATALYST OR CATALYSTS)
       1183317 PARTICLE?
          6281 CATALYST PARTICLE?
```

```
                (CATALYST(W)PARTICLE?)
          3373 SLUMP?
L2           0 PREVENT? (S) CATALYST PARTICLE? (S) SLUMP?

=> s catalyst particle? (s) slump?
        729863 CATALYST
        732702 CATALYSTS
        936653 CATALYST
                (CATALYST OR CATALYSTS)
       1183317 PARTICLE?
          6281 CATALYST PARTICLE?
                (CATALYST(W)PARTICLE?)
          3373 SLUMP?
L3           0 CATALYST PARTICLE? (S) SLUMP?

=> s reference flow rate and fischer tropsch
         74908 REFERENCE
        246964 REFERENCES
        318492 REFERENCE
                (REFERENCE OR REFERENCES)
        195044 REF
       1464767 REFS
       1648269 REF
                (REF OR REFS)
       1949140 REFERENCE
                (REFERENCE OR REF)
        852194 FLOW
         87059 FLOWS
        890941 FLOW
                (FLOW OR FLOWS)
       1763181 RATE
        589435 RATES
       2104529 RATE
                (RATE OR RATES)
             6 REFERENCE FLOW RATE
                (REFERENCE(W)FLOW(W)RATE)
         23831 FISCHER
            17 FISCHERS
         23843 FISCHER
                (FISCHER OR FISCHERS)
          8123 TROPSCH
          8020 FISCHER TROPSCH
                (FISCHER(W)TROPSCH)
L4           0 REFERENCE FLOW RATE AND FISCHER TROPSCH

=> d his

     (FILE 'HOME' ENTERED AT 10:00:49 ON 06 AUG 2006)

     FILE 'CAPLUS' ENTERED AT 10:01:02 ON 06 AUG 2006
L1           1 S GAS AGITATED FLUIDIZED BED
L2           0 S PREVENT? (S) CATALYST PARTICLE? (S) SLUMP?
L3           0 S CATALYST PARTICLE? (S) SLUMP?
L4           0 S REFERENCE FLOW RATE AND FISCHER TROPSCH

=> s gas agitated multiphase reactor
       1514333 GAS
        511435 GASES
       1696248 GAS
                (GAS OR GASES)
         26292 AGITATED
         14180 MULTIPHASE
            99 MULTIPHASES
         14252 MULTIPHASE
```

(MULTIPHASE OR MULTIPHASES)
413607 REACTOR
243995 REACTORS
464031 REACTOR
(REACTOR OR REACTORS)
L5 7 GAS AGITATED MULTIPHASE REACTOR
(GAS(W)AGITATED(W)MULTIPHASE(W)REACTOR)

=> d l5 ibib ab 1-7

L5 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1028104 CAPLUS
DOCUMENT NUMBER: 143:308084
TITLE: Prevention of and recovering from a catalyst bed slumping in a gas-agitated multiphase reactor used for hydrocarbon manufacture
INVENTOR(S): Mohedas, Sergio R.; Espinoza, Rafael L.; Cnossen, Jack E.; Harkins, Todd H.; Melquist, Vincent H.; Swinney, Larry D.
PATENT ASSIGNEE(S): Conocophillips Company, USA
SOURCE: U.S. Pat. Appl. Publ., 14 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005209351	A1	20050922	US 2004-804521	20040319
WO 2005095312	A1	20051013	WO 2005-US4800	20050216

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-804521 A 20040319
AB Methods are described for prevention of and recovery from a Fischer-Tropsch catalyst bed slumping in a gas-agitated multiphase hydrocarbon synthesis reactor, while the reactor is either under non-reactive conditions or under reaction promoting conditions when synthesis gas is converted to products. The reactor contains a catalyst bed comprising catalyst particles and a gas injection zone suitable for injecting a reactor gas feed. A method for preventing bed slumping comprises supplying a supplemental gas to the gas-agitated multiphase reactor to prevent the catalyst bed from slumping due to insufficient reactor gas feed flow. The method may include recycling some or all of the supplemental gas to the reactor. Process flow diagrams are presented.

L5 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:847659 CAPLUS
DOCUMENT NUMBER: 141:316988
TITLE: Process and apparatus for controlling flow in a multiphase reactor
INVENTOR(S): Jiang, Yi; Zhang, Jianping; Espinoza, Rafael L.
PATENT ASSIGNEE(S): Conocophillips Company, USA

SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004088227	A2	20041014	WO 2004-US8938	20040324
WO 2004088227	A3	20050526		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004235968	A1	20041125	US 2004-807851	20040324
PRIORITY APPLN. INFO.:			US 2003-458818P	P 20030328

AB The apparatus and method for controlling the hydrodynamics within a gas agitated multiphase reactor at a given gas linear velocity involve novel configurations of the multiphase reactor internal structures. The configurations comprise a plurality of discrete reaction flow zones created by arranging the internal structures of a multiphase reactor to create a more even distribution of smaller gas bubbles to enhance productivity and conversion.

L5 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:817413 CAPLUS
DOCUMENT NUMBER: 141:316239
TITLE: Conjoined reactor system for the manufacture of hydrocarbons from synthesis gas
INVENTOR(S): Espinoza, Rafael L.; Zhang, Jianping; Mohedas, Sergio R.; Ortego, James D., Jr.
PATENT ASSIGNEE(S): ConocoPhillips Company, USA
SOURCE: U.S., 18 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6800664	B1	20041005	US 2003-444459	20030523
WO 2004106824	A2	20041209	WO 2004-US12824	20040426
WO 2004106824	A3	20050310		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004235969	A1	20041125	US 2004-842171	20040510

PRIORITY APPLN. INFO.: US 2003-444459 A 20030523

AB A gas-agitated multiphase reactor system with multiple reaction zones comprising gas-liquid or gas-liquid-solid mixts. that can maximize the hydrocarbon production rate from synthesis gas, while allowing better control of the temperature distribution and better control of the liquid and solid phases in the reactors, is described. Also presented is a method for operating a pair of linked gas-agitated slurry reaction zones such that the hydrodynamic behavior and reactor performance of such reactor systems are improved compared to that of a conventional slurry-bed reactor.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:203564 CAPLUS
DOCUMENT NUMBER: 140:237642
TITLE: Gas-agitated multiphase reactor with stationary catalyst solid phase
INVENTOR(S): Mohedas, Sergio R.; Espinoza, Rafael L.; Zhang, Jianping
PATENT ASSIGNEE(S): Conoco Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004048938	A1	20040311	US 2002-238008	20020909

PRIORITY APPLN. INFO.: US 2002-238008 20020909

AB An apparatus for converting a gaseous and/or liquid feed fluid into gaseous and/or liquid products using a solid catalyst comprises a reactor, a liquid phase disposed within the reactor volume, a fixed catalyst at least partially disposed in the liquid phase, a cooling system having a cooling element in thermal contact with the liquid phase, a feed inlet positioned to feed the feed fluid into the reactor volume, and a fluid outlet in fluid communication with the liquid phase. The catalyst is contained in a catalyst container and the container may be adjacent to said cooling element, extend through said cooling element, or may surround the catalyst container. The catalyst may be a Fischer-Tropsch catalyst; reactor diagrams are presented.

L5 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:473275 CAPLUS
DOCUMENT NUMBER: 139:38569
TITLE: Slurry bed reactor
INVENTOR(S): Zhang, Jianping; Espinoza, Rafael L.; Mohedas, Sergio
PATENT ASSIGNEE(S): Conocophillips Company, USA
SOURCE: U.S. Pat. Appl. Publ., 13 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003114543	A1	20030619	US 2001-23258	20011214
US 6914082	B2	20050705		
CA 2470380	AA	20030626	CA 2002-2470380	20021213
WO 2003052335	A2	20030626	WO 2002-US39826	20021213

WO 2003052335 A3 20040115
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2002359691 A1 20030630 AU 2002-359691 20021213
EP 1453779 A2 20040908 EP 2002-794244 20021213
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
PRIORITY APPLN. INFO.: US 2001-23258 A 20011214
WO 2002-US39826 W 20021213

AB The invention relates to a Fischer-Tropsch process for making hydrocarbons from syngas. A gas-agitated multiphase reactor system for the synthesis of hydrocarbons gives high catalyst productivity and reactor capacity. The system includes operating a multi-phase reactor in the well-mixed gas flow regime, with a Peclet number less than 0.175 and a single pass conversion ranging from 35% to 75%, wherein the inlet superficial gas velocity decreases with the decreasing of the reactor aspect ratio, and is preferably at least 20 cm/s.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:98000 CAPLUS
DOCUMENT NUMBER: 138:139271
TITLE: Minimizing the volume or maximizing the production rate of slurry bubble reactors by using large gas flow rates and moderate single pass conversion
INVENTOR(S): Zhang, Jianping; Wright, Harold A.
PATENT ASSIGNEE(S): Conoco Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003027875	A1	20030206	US 2002-205215	20020725
ZA 2004000281	A	20050114	ZA 2004-281	20040114

PRIORITY APPLN. INFO.: US 2001-307742P P 20010725

AB A gas-agitated multiphase reactor system that is effective for enabling maximum reactor productivity or minimizing reactor volume comprising at least two stages with or without recycle, wherein inlet gas superficial velocity is at least 20 cm/s at Fischer-Tropsch synthesis, yielding a total syngas conversion of greater than .apprx.90%, while syngas conversion in each reactor is <60%. More specifically, the total reactor volume is held to a min. such that min. reactor volume is <0.02 cubic meters total reactor volume/(kg C5+ /h production).

L5 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:97378 CAPLUS
DOCUMENT NUMBER: 138:156122
TITLE: Optimization of Fischer-Tropsch production rate in slurry bubble reactors with large gas flow rates and moderate single-pass conversion

INVENTOR(S): Zhang, Jianping; Wright, Harold A.
PATENT ASSIGNEE(S): Conoco Inc., USA; Conocophillips Co.
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003010117	A2	20030206	WO 2002-US23796	20020725
WO 2003010117	A3	20031106		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2454237	AA	20030206	CA 2002-2454237	20020725
EP 1414774	A2	20040506	EP 2002-759188	20020725
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
ZA 2004000281	A	20050114	ZA 2004-281	20040114
PRIORITY APPLN. INFO.:			US 2001-307742P P	20010725
			WO 2002-US23796 W	20020725

AB A gas-agitated multiphase reactor system, for achieving maximum reactor productivity with minimized reactor volume, especially in slurry bubble Fischer-Tropsch reactors, comprises at least two stages with or without recycle, in which the inlet gas superficial velocity is >20 cm/s, yielding a total synthesis gas conversion of >90% at a synthesis gas conversions in each reactor is <60%. Heavy material (e.g., b. >40°), including water, can be condensed between reactor stages so that unconverted synthesis gas is passed to addnl. reactors for addnl. conversion. More specifically, the total reactor volume is held to a min. such that the min. reactor volume is <0.02 m3, the C5+ productivity per reactor is >0.2 g C5+ hydrocarbons/g-h catalyst, and the overall C5+ volumetric production is >50 kg C5+ hydrocarbons/h-m3 expanded catalyst bed.

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NEWS 9	MAY 30	The F-Term thesaurus is now available in CA/CAplus
NEWS 10	JUN 02	The first reclassification of IPC codes now complete in INPADOC
NEWS 11	JUN 26	TULSA/TULSA2 reloaded and enhanced with new search and and display fields
NEWS 12	JUN 28	Price changes in full-text patent databases EPFULL and PCTFULL
NEWS 13	JUl 11	CHEMSAFE reloaded and enhanced
NEWS 14	JUl 14	FSTA enhanced with Japanese patents
NEWS 15	JUl 19	Coverage of Research Disclosure reinstated in DWPI

NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

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        318492 REFERENCE
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       1464767 REFS
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                 (REFERENCE OR REF)
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                 (REFERENCE(W)FLOW(W)RATE)

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            17 FISCHERS
         23843 FISCHER
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          8123 TROPSCH
          8020 FISCHER TROPSCH
                 (FISCHER(W)TROPSCH)
L2           0 L1 AND FISCHER TROPSCH

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        936653 CATALYST
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           347 PREVENT? CATALYST
                 (PREVENT?(W)CATALYST)
          3373 SLUMP?
             0 PREVENT? CATALYST (S) SLUMP?
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           8123 TROPSCH
           8020 FISCHER TROPSCH
                (FISCHER(W)TROPSCH)
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                (CATALYST OR CATALYSTS)
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=> d l5 1-2

L5   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:1028104  CAPLUS
DN   143:308084
TI   Prevention of and recovering from a catalyst bed slumping in a
     gas-agitated multiphase reactor used for hydrocarbon manufacture
IN   Mohedas, Sergio R.; Espinoza, Rafael L.; Cnossen, Jack E.; Harkins, Todd
     H.; Melquist, Vincent H.; Swinney, Larry D.
PA   Conocophillips Company, USA
SO   U.S. Pat. Appl. Publ., 14 pp.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
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PI   US 2005209351        A1    20050922    US 2004-804521          20040319
     WO 2005095312        A1    20051013    WO 2005-US4800          20050216
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
             SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
PRAI US 2004-804521       A     20040319

L5   ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1996:449698  CAPLUS
DN   125:89867
```

TI Catalytic reactor for steam reforming reactor fuel into product gas and designed to decrease catalyst slumping and crushing

IN Sederquist, Richard A.; Corrigan, Thomas J.; Szydlowski, Donald F.; Bonk, Stanley O.

PA International Fuel Cells Corporation, USA

SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9615850	A1	19960530	WO 1995-US12233	19950922
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2207922	AA	19960530	CA 1995-2207922	19950922
	EP 792189	A1	19970903	EP 1995-933214	19950922
	EP 792189	B1	19980805		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, PT, SE				
	AT 169240	E	19980815	AT 1995-933214	19950922
	JP 10509091	T2	19980908	JP 1995-516816	19950922
PRAI	US 1994-340937	A	19941117		
	WO 1995-US12233	W	19950922		